Switch 4005 Release Notes

Switch Fabric Management Module, Release 1.1

http://www.3com.com/

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3Com Corporation
5400 Bayfront Plaza
Santa Clara, California
95052-8145

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1 INTRODUCTION

Scope

These release notes summarize operational requirements and issues for the following Switch 4005 modules and software releases:

Table 1 Software Release Numbers Addressed in These Release Notes

Description	Model	Pre-loaded Software Release
Switch Fabric Management Module (SFMM)	3C16824	Boot code 1.00 Runtime code 1.1

Important Notices

Read these important notices before you begin.

To obtain later software maintenance releases or upgrades and associated release notes for the Switch 4005, visit the 3Com Web site:

support.3com.com/infodeli/swlib/index.htm

For comprehensive, up-to-date information about the Switch 4005 and other 3Com products, see the online user guides on the 3Com Web site:

http://support.3com.com/nav/switches.htm

System Requirements

Each Switch 4005 chassis has these minimum system requirements:

- One power supply.

  To provide power backup, you can optionally install a second power supply.
- Two fan trays.
- One Switch Fabric Management Module (Model Number 3C16824).
- An appropriate number of Interface Modules.

2 Release Issues for Switch Fabric Management Modules

This chapter addresses the issues for the Switch 4005 Switch Fabric Management Module at the release numbers cited in Table 1 on page 5. The topics are:

- Operating Considerations
- Known Problems

In these release notes, the Switch Fabric Management Module is referred to as the SFMM for brevity.

Operating Considerations

This section describes operating considerations that apply to the SFMM at this release:

- To indicate progress during TFTP Download, the byte indicator needs to be set on the TFTP server.
- During the download process system error messages are displayed on the local console interface only.
- Do not attempt to perform any management tasks while you are downloading software to the SFMM.
- While you are downloading a file, do not close the console window that you used to execute the command.
- All new SFMM modules are shipped with V1.1 runtime code. If you upgrade the runtime code for an existing SFMM from V1.01 to V1.1, all configuration information is retained. Refer to "Downloading to an SFMM" on page 21.
- Before you install a secondary SFMM in the chassis, refer to "Download procedure for a chassis using a secondary SFMM" on page 19.

- To gain access to the SFMM command interface, the system prompts you for a username and password. The default username is `admin` (lowercase), but there is no default password. The first time that you log in, simply press Enter at the password prompt.

  To define a password for your system, use the `system management password` command at the prompt. After you enter the password, the SFMM user interface prompts you to reenter it to verify it.

- If two SFMM modules are installed, synchronization messages may be displayed after the Login prompt, followed by the cursor. Simply press the Enter key to display the Login prompt again.

- If you are using Microsoft Internet Explorer to access the Web management interface for the Switch 4005, you may need to adjust the refresh settings for the browser as described below.

  To ensure proper screen refresh, configure Internet Explorer 5.x as follows: Under the menu "Tools / Internet Options / General / Temporary Internet Files / Settings," the setting for item "Check for newer versions of stored pages" should be "Every visit to the page."

  When using Internet Explorer 5.0, you may have to manually refresh the screen after making configuration changes by pressing the browser's refresh button.

- When using a browser to access the Web management interface for the Switch 4005, note that the optimal screen resolution is 800 x 600.

- Because STP is enabled by default on the Switch, you must first disable STP before you can use BOOTP to get an IP address for the system from the network.

- Ping does not report the number of hops.

Known Problems

This section describes known problems that apply to the SFMM in this release:

- In some meshed configurations when using RIP with the Spanning Tree Protocol disabled, if a topology change occurs, the routing tables may not update correctly which could cause packets to be lost. To avoid this scenario do not disable the Spanning Tree Protocol.

- The command bridge/vlan/detail does not allow you to view a subset of VLANs. You can display details for either one or all of the VLANs.

3 Release Issues for Interface Modules

This chapter addresses issues for Interface Modules for the software releases noted in Table 1 on page 5. The topics in this chapter are:

- Operating Considerations
- Known Problems

Operating Considerations

This section describes operating considerations that apply to Interface Modules at this release.

System

- You cannot stage a module in one chassis and then move that module to another chassis, because port mapping is based on the module's hardware identifier.
- The 10/100BASE-TX ports on the 3C16828 Fast Ethernet module may not autonegotiate with a SUN Ultra 2 10/100BASE-TX Ethernet card. If traffic is sent from the SUN during autonegotiation, then autonegotiation completes successfully.
- The Switch 4005 does not support Strict Source Routing or ICMP Redirection.

Module NVdata

- You cannot restore the nonvolatile data (NVdata) configuration from one Switch 4005 interface module to another.

SNMP

- To prevent timeouts of SNMP requests, 3Com recommends that you increase the default timeout for the network management station.
- SNMP response time may vary depending on the current network load.

Ethernet

- If the autonegotiation feature for a 100 Mbps Ethernet link does not function properly, disable autonegotiation and manually set the port speed and duplex mode (`half-duplex` or `full-duplex`). Also, on a 1000 Mbps link, autonegotiation must match on both sides of the link.

Link Aggregation

- You cannot create more than one trunk per slot.
- When trunking to another Switch 4005 from a 2-port Gigabit module, we recommend using the same module type on both ends of the link in to obtain optimal trunking performance.

Bridging

- Bridged IP multicast frames are not counted in the bridge statistics.

IGMP

- The Switch will not act as an IGMP Querier. The Switch will not send IGMP Queries.
- An IGMP Server must be a member of the IGMP Group for traffic to be forwarded to clients.

Routing Limitation

- You cannot route IP packets over a blocked port.

Priority Tags

- A tagged VLAN egress port adds COS priority tags when an untagged frame is forwarded to an untagged port on the same VLAN.

Roving Analysis

- Remove a static address from a port before you use it as a roving analysis port. If the Bridge Table has a static address for a given port, and the port is then designated as the "Analyzer" port for RAP, the static address is still functional, which results in the forwarding of unwanted packets through the Analyzer port.
- If the module drops packets, these dropped packets are not mirrored to an analyzer port.
- Mirroring between ports with different VLAN configurations is not supported.
- Trunked ports cannot be configured as analyzer or monitor ports.
- Higher speed Gigabit ports can mirror lower speed ports, but lower speed ports cannot mirror higher speed ports.

Transmit and Receive Ports on GBIC Modules

- When a GBIC module is inserted in the a GBIC Gigabit Ethernet Module (Model Number 3C16826 or 3C16843), the Receive port is the top port and the Transmit port is the bottom port.

  These ports are in opposite positions on the 1000BASE-SX Gigabit Ethernet Module (Model Number 3C16825), with the Transmit port at the top and the Receive port at the bottom.

Hot Swapping

CAUTION: *Be sure to follow the proper procedures for removing a module from the chassis, otherwise the system will crash and restart itself.*

CAUTION: *The interface modules cannot function unless a Switch Fabric Management Module is installed in the chassis.*

To remove a Switch Fabric Management Module or interface module from the Switch 4005 chassis, follow these steps:

1. Press the recessed button on the module's front panel to start the module shut-down procedure, and wait until the module's Release LED (R) stops flashing before taking any further action. Also note that the Command Line Interface will indicate when the shut-down procedure has been completed.

CAUTION: *The recessed button on the module's front panel must be pressed before removing the module. When the Release LED flashes, the module is completing the transfer of the current packets through its ports before it halts operation. Wait until this LED stops flashing (i.e., changes to steady Amber) before you remove the module.*

2. Loosen the spring-loaded screws at each end of the front panel, using a flathead screwdriver.
3. Grasp the top ejector handle with the thumb and forefinger of one hand, and the bottom ejector handle with the other hand. Simultaneously pull the ejector handles until each handle is perpendicular to the front panel. You will feel a slight resistance as the connectors disengage.

CAUTION: *Do not twist or bend the module when you remove it from the chassis.*

WARNING: *Hazardous energy exists inside the chassis. Do not place hands or objects into the chassis or touch components on a partially inserted module.*

4. Gently pull the module out of the chassis, along the guides at the top and the bottom of the slot.

5 If you are going to leave the slot empty, cover it with a blank faceplate to ensure proper airflow and cooling in the chassis.

Do Not Configure When a Module Is Removed

- If you remove any interface module that contains ports assigned to a VLAN (other than VLAN 1), subsequently make configuration changes that are written to NVRAM (such as enabling STP), and then re-insert the module, the module will be reset to factory defaults, whereby all ports are returned to the default VLAN.

  However, once you bind an IP interface to a VLAN, that interface will be removed if you delete the VLAN through the management interface.

Known Problems

This section describes known problems that apply to Interface Modules at this release.

System

- At the Administration Console, entering a seemingly valid command string (two or more commands taken from menus and nested submenus) may not work. If this situation occurs, enter commands separately from one menu prompt at a time.

VLAN Configuration

- If you remove and then re-insert a module into the same slot, the module may be reset to factory defaults, whereby all ports are returned to the default VLAN.
- When a module has several VLANs, and is moved to another slot, and then back to the original slot, all VLAN settings for the module are erased.

SNMP Management

- Static routes cannot be created or removed via the MIB.
- RIP Receive Mode cannot be disabled via the MIB.
- The a3ComVlanIfTable is not implemented in this device. Please use the dot1qVlanStaticTable to create an manage VLANs via the MIB.
- At the present time, SNMP download of Switch Fabric Management Module (SFMM) software is not supported.

Web-based Management

- Not all commands provided by the command line interface are available through the Web interface. For example, you cannot create multiple IP interfaces for a single VLAN through the Web interface.

- For the current firmware release, only the user "admin" can access the Web interface.
- When you choose "Reboot" from the Device View System/Control folder, the following message appears: "`This operation will simulate a power cycle on the system. Do you wish to continue?`" If you click OK, the system begins to reboot, but the message stays on the screen, and the browser stalls while waiting for a response. The message remains on the screen even after the Switch reboots. You therefore have to click the browser's Refresh button.

Dual Speed Hub 500

- Auto-negotiation sometimes fails when 10/100BASE-TX ports on the Switch 4005 are connected to ports on the Dual Speed Hub 500 (DSH 500). When ports on this Switch are configured to auto-negotiation and are then connected to ports on the DSH 500 which are fixed at 10 Mbps (half duplex), a link may sometimes be slow to establish or may fail to establish. This problem is caused by the DSH 500, and is currently under study.

100BASE-FX (MT-RJ Module)

- The Link LED on this module (3C16829) has now been changed from single color (green) to dual color LED (green and amber) as indicated on Page 53 in the *Switch 4005 Installation and Maintenance Guide*.

1000BASE-T Module

- The Link LED on the 2-port module (3C16841) may stay illuminated for several seconds after the network cable is removed, and the Mode LED flashes yellow as if receiving or transmitting packets.

CoS Propagation

- If the egress port for a frame is tagged, then the 802.1 VLAN tag of the egress frame will contain the CoS value of the frame at the ingress port.
- An untagged frame is assigned a default CoS priority of 0 at ingress. In other words, if an untagged packet enters an interface module and the VLAN settings modify the packet to become a tagged packet, the module can insert VLAN information but cannot set a priority level other than 0.

  A restriction at the chip level regarding untagged frames at the ingress port (entering the module) is that the chip's internal mapping table will translate the original eight (8) input CoS values into four (4) output CoS values based on one of the original input CoS values.

See the table below for the input to output CoS translation for untagged frames at the ingress port:

Input CoS	Traffic Class	Output CoS
1	0	2
2	0	2
0	1	0
3	1	0
4	2	4
5	2	4
6	3	7
7	3	7

4 DOCUMENTATION CHANGES

This chapter describes information that is either incorrect or not documented in the indicated Switch 4005 manuals.

In these release notes, the Switch Fabric Management Module is referred to as the SFMM for brevity.

Switch 4005 Key Information Guide

This section describes issues that apply to the *Switch 4005 Key Information Guide*.

- Page 10, item 10 now includes the following additional interface modules:
  - Model Number 3C16832 holds five 2-port 1000BASE-T Interface Modules (3C16841) in slots 1 through 5.
  - Model Number 3C16833 holds five 2-port 1000BASE-SX Interface Modules (3C16842) in slots 1 through 5.

Switch 4005 Installation and Maintenance Guide

This section describes issues that apply to the *Switch 4005 Installation and Maintenance Guide* (Published April 2001).

- Page 9, second Information Note, second sentence should read "However, you can install a second (redundant) SFMM to provide standby management support."
- Page 11, Product Overview, first paragraph, second sentence should read "The Switch 4005 currently supports redundant power supplies, redundant Switch Fabric Management Modules, and a variety of Fast Ethernet and Gigabit Ethernet Interface Modules."
- Page 11, Physical Description, third bullet, first paragraph should read "Only one SFMM is required for normal operation. If the SFMM is removed from a powered up chassis that is functioning in a network, chassis operations will cease. However, if a backup SFMM is installed

in the chassis, and the primary SFMM is removed or fails, the backup SFMM will take over operations."

- Page 12, Module Slots in the Chassis, first Information Note should be removed.
- Page 14, Switch Backplane Architecture, first Information Note should be removed.
- Refer to the *Switch 4005 Installation and Management Guide Addendum (Release 1.1)* for additional changes.

Switch 4005 Software Configuration Guide

This section describes issues that apply to *Switch 4005 Software Configuration Guide*. These issues may be corrections, additions, or clarifications.

- The Switch 4005 supports 64 IP interfaces. This number has been incorrectly listed as 128 on page 20 and 188.
- Page 29, the second Information Note on should read "Your management workstation can be connected to any interface port on the Switch, regardless of the VLAN assignment. However, if routing is disabled, the management station and Switch interface port to which it is connected must be configured to the same IP subnet."
- Page 96, 100, 101. The statement that "Gigabit Ethernet trunk groups can cross modules" only applies to Gigabit modules of the same media type and port count. For example, the single-port 1000BASE-SX SC-type module (3C16825) can only be trunked with another 3C16825, and the dual-port 1000BASE-SX MT-RJ type module (3C16842) can only be trunked with another 3C16842.
- Page 198. The information note at the bottom of the page is incorrect. This switch does not support routing over a port blocked by the Spanning Tree Protocol.
- Page 219. This switch does not support ICMP Router Discovery. Please ignore any references to this feature.

5 SOFTWARE INSTALLATION

Because all new SFMM modules are shipped with V1.1 runtime code, this chapter only applies under these conditions:

- If you need to reinstall SFMM software for any reason, for example it has become corrupted, or
- If you are upgrading from an earlier software release to Release 1.1, for either a primary or secondary SFMM.

This chapter provides the following software installation procedures for software release 1.1. This chapter contains the following topics:

- Checking Software Release Numbers
- How to Obtain Software Image Files
- Installation and Upgrade Prerequisites
- Downloading Software Release 1.1
- Entering Commands

In these release notes, the Switch Fabric Management Module is often referred to as the SFMM for brevity.

Checking Software Release Numbers

The release numbers for software release 1.1 are shown in the following table.

Table 2 Current Software Release Numbers and Default Filenames

Description	Model	Pre-loaded Software Release	Filename
Switch Fabric Management Module (SFMM)	3C16824	Management	
		Post code 1.00	postV100.bix
		Runtime code 1.1	4005V11.bix

How to Obtain Software Image Files

To obtain image files for software Release 1.1, contact your network supplier or 3Com representative, or visit the 3Com Web site at:

http://support.3com.com/infodeli/swlib/index.htm

Installation and Upgrade Prerequisites

Before you upgrade the modules to Release 1.1, read this section for important procedures.

- Have ready the software upgrades and associated release notes for the SFMM that you are upgrading.

To obtain software upgrades and release notes, see your network supplier or 3Com representative, or visit the 3Com Web site at:

http://support.3com.com/infodeli/swlib/index.htm

- If you have a new SFMM that uses software Release 1.1, you can now install your module in slot M1 or M2. See the *Switch 4005 Installation and Maintenance Guide* for guidelines and procedures.

Downloading Software Release 1.1

This section describes how to download software Release 1.1.

CAUTION: *Do not attempt to perform any management tasks while you are downloading software.*

Download procedure for a chassis using a secondary SFMM

If you do not know which software version is loaded on a newly purchased SFMM:

All SFMM currently shipping are loaded with software Release 1.1. However, some of the earlier SFMM in stock may be loaded with Release 1.01. If you are not sure which version is loaded on the module you want to use for the backup SFMM, first try upgrading your system according to the following procedure.

1 **DO NOT insert the new SFMM into slot M2 yet.**

2 With the chassis running, upgrade the existing single SFMM with software Release 1.1 as described in "Downloading to an SFMM," page 21.

3 After you have successfully upgraded the primary SFMM, insert the new SFMM into slot M2.

4 Depending on the software revision loaded in the new SFMM, the system will display one of the message sequences shown below.

- If the new SFMM is loaded with software Revision 1.1, the system will synchronize all configuration information from the SFMM in slot M1 to the new SFMM in slot M2, displaying the following messages:

  "Starts to sync all of the EE data to backup agent, EE Version = 0004
  Number of EE sections to be synced = xx
  EE Synchronization is completed, total xx sections are synced"

  The secondary SFMM is now functioning.

- However, if the secondary SFMM is loaded with software Release 1.01, the upgrade procedure will not complete successfully. Instead, the console for the primary SFMM will display the following messages:

  "EE Version Incompatible, Master EE Version = 4, Slave EE Version = 0000
  EE Synchronization aborts"

  And the console interface for backup SFMM will show that the bootup process has stalled at "Chassis Backup Master..."

  If you see these messages, then remove the backup SFMM (loaded with software Revision V1.01), and upgrade the system according to the following procedure "If you have an earlier SFMM that is loaded with software Release 1.01" shown on page 20.

If the newly purchased SFMM is loaded with software Release 1.1:

1 **DO NOT insert the new SFMM into slot M2 yet.**

2 With the chassis running, upgrade the existing single SFMM with software Release 1.1 as described in "Downloading to an SFMM," page 21.

3 After you have successfully upgraded the primary SFMM, insert the new SFMM into slot M2.

4 The system will synchronize all configuration information from the SFMM in slot M1 to the new SFMM in slot M2, displaying the following messages:

"Starts to sync all of the EE data to backup agent, EE Version = 0004
Number of EE sections to be synced = xx
EE Synchronization is completed, total xx sections are synced"

5 The secondary SFMM is now functioning.

If you have an earlier SFMM that is loaded with software Release 1.01:

The following procedure will take approximately 30 minutes to complete, during which time all network connections to the chassis will be down.

1 With the chassis running, upgrade the existing single SFMM with software Release 1.1 as described in "Downloading to an SFMM," page 21.

2 After you have successfully upgraded the primary SFMM, power down the chassis.

3 Remove the primary SFMM from the chassis.

4 Insert the newly purchased SFMM into slot M1.

5 Power up the chassis.

6 When the system comes up, assign an IP address to the SFMM using the protocol/ip/basicConfig command. (This address is required to upgrade the SFMM's software revision via TFTP.) Then upgrade this SFMM with software Release 1.1 as described in "Downloading to an SFMM," on page 21.

7 After you have successfully upgraded the new SFMM, power down the chassis.

8 Remove the new SFMM from the chassis.

9 Re-insert the primary SFMM that was removed from the chassis in Step 3 into slot M1. **DO NOT insert the other SFMM into slot M2 yet.**

10 Power up the chassis.

11 When system comes up all the way, first verify that the current firmware is software Revision 1.1, and then insert the secondary SFMM into slot M2. The system will synchronize all configuration information from the primary SFMM in slot M1 to the secondary SFMM in slot M2, displaying the following messages:

"Starts to sync all of the EE data to backup agent, EE Version = 0004
Number of EE sections to be synced = xx
EE Synchronization is completed, total xx sections are synced"

12 The secondary SFMM is now functioning.

Downloading to an SFMM

This section describes how to load software Release 1.1 onto an SFMM. This section assumes that:

- You have loaded the post code and runtime code on your computer from the 3Com Web site at the following URL:

  `http://support.3com.com/infodeli/swlib/index.htm`

CAUTION: *You will lose network connectivity to all of the modules if you remove the SFMM from the chassis.*

CAUTION: *Do not attempt to perform any management tasks while you are downloading software.*

Do not turn the Switch 4005 off during system upgrade.

You can download runtime code to the Switch using any of the procedures described in the following sections. However, you can only download POST code to the Switch via the console interface as described in the following section.

Loading Software via the TFTP Protocol

If you do not have a TFTP download application, please download 3Com's free TFTP software at:

`http://support.3com.com/software/additional.htm`

You can download the Runtime code in-band through a connection between a TFTP server and the Switch using either the console interface or the browser interface. However, you must first configure and initialize a TFTP server on the network as described below.

1. Copy the runtime code to the appropriate directory on the TFTP server.
2. Start the TFTP server utility.
3. Ping the Switch 4005 from your server to ensure that both devices can communicate.

   If you cannot ping the Switch, verify that TFTP server's IP subnet is listed in Switch's routing table (using the `protocol ip route summary` command). If not, create a VLAN containing the port(s) that lead to the TFTP server (using the `bridge vlan create` command). Then create an IP interface for the VLAN that encompasses the server's IP subnet (using the `protocol ip interface create` command).

Loading Software via TFTP Using the Browser Interface

You can download the Runtime code in-band through a connection between a TFTP server and the Switch using the browser interface.

1. Open your browser and log into the Switch's management interface.
2. Select "Device View" from the menu bar at the top of the screen.
3. Select System/Control/Software Upgrade from the menu tree.
4. When the pop-up window is displayed, enter the file name for the runtime code and the address of your TFTP Server, then press OK.

   This will upgrade the software in the system's primary management module. After the upgrade has been completed the system will reset and will be temporarily unavailable.

Loading Software via TFTP Using the Console Interface

Enter the `system control softwareUpgrade` command, and specify the IP address of the TFTP server and the file name for the runtime code.

```
Select menu option: system control softwareUpgrade
TFTP Server Address [0.0.0.0]: 192.168.141.21
File Name []: 4005V11.bix
Software Upgrade has begun...
```

When the upgrade is complete, the following message will appear:

```
Downloaded Image File Check OK!!
Update FlashROM Image at 0x030C0000 ... SUCCESS !
```

The Switch will then automatically reboot.

Loading Software via XModem Using the Console Interface

You can upgrade system firmware (Runtime or POST) by connecting a computer to the serial port on the Switch and using a terminal emulation program that supports the XModem protocol. (See the *Switch 4005 Installation and Maintenance Guide* for the required connections.)

1. Initialize any terminal emulation program that supports the XModem protocol, such as Windows HyperTerminal.
   - **a** Start the terminal emulation program.
   - **b** Specify the port attached to the Switch, such as COM2.
   - **c** Set the baud rate to 9600 bps.
   - **d** Disable Flow Control.
   - **e** Press OK
2. Restart the system by using the `System Control Reboot` command, or by pulling out the power cord to reset the power, waiting five seconds, and plugging it back in.
3. When the system initialization screen appears as shown below, press "D" to download system firmware. You have less than 10 seconds to choose the Download option. After this delay, the system will automatically start the console interface program.

```
(c)2001 3COM Corporation
Switch 4005
LOADER Version V1.00
POST   Version V1.00

------ Performing the Power-On Self Test (POST) ------
EPROM Checksum Test ....................... PASS
Testing the System SDRAM .................. PASS
CPU Self Test ............................. PASS
EEPROM Checksum Test ...................... PASS
MAC Address .............. 00-E0-29-9F-35-21
------------ Power-On Self Test Completed ------------

(D)ownload System Image or (S)tart Application: [S]D
```

4 Then indicate the code type: (1)Runtime (2)POST (9)MicroCode.

```
Select the Firmware Type to Download
(1)Runtime (2)POST (9)MicroCode [1]:1
Your Selection: Runtime Code
```

5 Change the baud rate for the serial port connected to the Switch to 115200 and press Enter to enable download.

```
Change Baud Rate to 115200 and Press <ENTER> to Download.
XModem Download to DRAM buffer area 0x00200000:
```

If you use Windows HyperTerminal, disconnect , set the baud rate, and reconnect .

6 From the terminal emulation program, select the file you want to download, set the protocol to XModem, and then initialize downloading.

The download file should be a Switch 4005 binary file from 3Com; otherwise the SFMM will not accept it.

The system will download the Runtime or POST file to Flash ROM on the SFMM, or the MicroCode file to the interface modules. If the download is successful, the following messages will appear:

```
XModem Download to DRAM buffer area 0x00200000:  ... SUCCESS !
Verifying image in DRAM download buffer 0x00200000... SUCCESS !
Update FlashROM Image at 0x030C0000 ... SUCCESS !
(D)ownload another Image or (S)tart Application: [S]
```

7 After the file has been downloaded, press "D" to download another file, or "S" to start the console interface program, and then press Enter.

8 Change the baud rate back to 9600, press Enter to start. After the system finishes initialization and diagnostics, the logon prompt is displayed.

Entering Commands

Before you enter any command, 3Com recommends that you:

- Examine all menus and submenus carefully to obtain the complete and correct command string.
- Consult the documentation for the valid minimum abbreviation for the command string.
- Unlike past 3Com products, partial CLI commands do not work when typing just any letters from a command, i.e., "ify" for modify. The partial matching only occurs from the beginning of the word, i.e., "mod" for modify.